

AD-A183 007

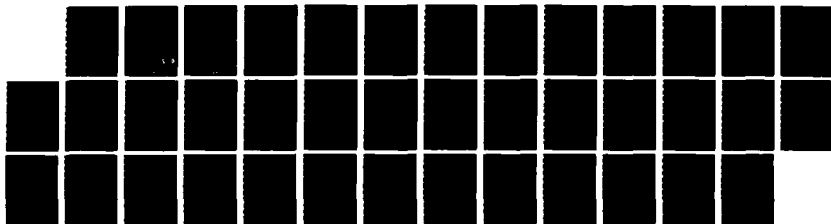
DOES BUSINESS STRATEGY AFFECT PERSONNEL MANAGEMENT
PRACTICES?(U) TEXAS A AND M UNIV COLLEGE STATION DEPT
OF MANAGEMENT C D FISHER ET AL APR 87 TR-ONR-11
N00014-85-K-0289

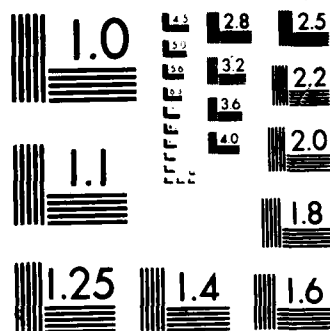
1/1

UNCLASSIFIED

F/G 5/3

NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

AD-A183 007

Human Resources Research

DOES BUSINESS STRATEGY AFFECT
PERSONNEL MANAGEMENT PRACTICES?

Cynthia D. Fisher
and
James B. Shaw

May 1987

TR-DNR-11

Texas A&M University
and
Virginia Polytechnic Institute

DTIC
ELECTE
JUL 27 1987
S E D

This document has been approved
for public release and sale in
distribution is unlimited.

87 7 24 007

**DOES BUSINESS STRATEGY AFFECT
PERSONNEL MANAGEMENT PRACTICES?**

**Cynthia D. Fisher
and
James B. Shaw**

May 1987

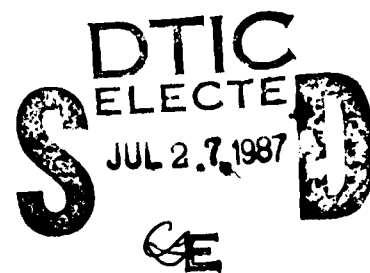
TR-ONR-11

Accession For	
NTIS GRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input checked="" type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	



**Department of Management
Texas A&M University**

**Prepared for:
Office of Naval Research
800 N. Quincy Street
Arlington, Virginia 22217**



This report was prepared for the Manpower R&D Program of the Office of Naval Research under contract N00014-85-k-0289. Reproduction in whole or in part is permitted for any purpose of the United States Government.

This document has been approved
for public release and sale
Distribution is unlimited

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER TR-UNR-11	2. GOVT ACCESSION NO. A183 007	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Does Business Strategy Affect Personnel Management Practices		5. TYPE OF REPORT & PERIOD COVERED Technical Report
7. AUTHOR(s) Cynthia D. Fisher and James B. Shaw		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS Department of Management Texas A&M University College Station, TX 77843		8. CONTRACT OR GRANT NUMBER(s) N-00014-B5-k-0289
11. CONTROLLING OFFICE NAME AND ADDRESS Office of Naval Research Department of the Navy Arlington, VA 22217		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS NR-475-036
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		12. REPORT DATE April, 1987
		13. NUMBER OF PAGES 32
		15. SECURITY CLASS. (of this report) Unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES Supported by the Office of Naval Research Manpower R&D Program		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Business strategy, human resource strategy, personnel practices, personnel management.		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The effect of business strategy (defender versus analyzer and prospecter) on a variety of human resource management practices was assessed. Hypotheses regarding selection, training, and compensation were supported. Those regarding job analysis use of written HRM policies, promotion practices and performance appraisal were not supported. Factors which may weaken the strategy-practice match were discussed extensively.		

DD FORM 1473

JAN 73

EDITION OF 1 NOV 65 IS OBSOLETE

N 010-11F-014-6A01

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

Does Business Strategy Affect
Personnel Management Practices?

In a special issue of Industrial Relations on human resources management strategy, Milkovich (1984) pointed out that we know very little about the factors which affect variations in personnel policies and decisions. Dyer (1984, p. 161) went on to propose that, "Organizational strategy is the major determinant of organizational human resource strategy content." Finally, Olian and Rynes (1984) suggested more specifically that organizations pursuing different business level strategies would tend to use different standards and procedures in recruiting and selecting employees. The latter would be chosen to produce the type of employees needed to implement the specific strategy. It is also possible to make predictions about how strategy should logically affect practices in other areas of personnel management, such as training, appraisal, and compensation (c.f. Miles and Snow, 1984).

On the other hand, recent research and theory has suggested that many aspects of organizational structure and practices are not dictated by their effectiveness for meeting organizational goals. Personnel practices may be adopted for many reasons unrelated to their immediate utility, such as political pressure or the desire to appear legitimate. If this is the case, then strategy may not be a strong

determinant of personnel practices. In fact, Dyer's second proposition was, "The relationship between organizational strategy and organizational human resource strategy content is moderated by characteristics of the organization's external and internal environments." (1984, p. 161).

Strategy and Personnel Practices

In their 1984 theoretical paper, Olian and Rynes adopted the Miles and Snow (1978) typology of defenders, prospectors, and analyzers as the basis on which to make their predictions about recruiting and selection practices. Miles and Snow (1984) also suggested that their typology had implications for designing strategic human resource systems. According to this typology, defenders are organizations which compete in a well-defined niche in a stable market. They do very little new product research and development, and instead try to distinguish themselves by very efficiently providing high quality products, reliable service, and/or competitive pricing. These organizations tend to employ only one major technology, to be centralized, to have a functional structure, and to employ hierarchical coordination and control. Leaders often have long tenure and have risen through the ranks within the organization.

Prospectors pursue a strategy of continuously developing new products and new markets. Organizations following this strategy tend to be decentralized and rely on informal

control mechanisms. They are likely to hire from outside the organization when new types of skills and leadership are required by rapid environmental change and multiple technologies.

Analyzers have characteristics of both of the above types. Some of their businesses are stable, while in other areas they change rapidly in imitation of successful prospector-developed products or markets. Analyzers often have a "dual technological core"--one stable and efficient technology for defender-type subunits, and flexible technologies in more innovative subunits.

A final organizational type is called reactors. These are organizations which are not pursuing any of the above strategies coherently. Their structures, strategies, and goals are not well articulated and/or do not match their environments. These organizations are not likely to survive unless these problems are resolved. On the other hand, defender, prospector, and analyzer strategies are all considered to be stable and viable forms of adaptation when properly implemented (Miles and Snow, 1978).

To the limited extent that Miles and Snow (1978) touch on the human resource implications of these strategies, they seem to indicate that prospectors and analyzers will be relatively similar to each other while defenders and

reactors will appear together at the opposite end of the continuum. In particular, they found some evidence that prospectors and analyzers endorsed current human resources management beliefs, while defenders and reactors clung to the older human relations school of thought. In this paper, analyzers and prospectors will be combined and compared to defenders in terms of personnel management policies and practices in five areas.

Recruiting and Selection. Olian and Rynes (1984) suggested that prospectors need a wider range of skills than do defenders, so that prospectors would tend to use a larger variety of recruiting sources and methods to locate these employees. Because analyzers need to staff both stable and flexible technology subunits, one might expect that they too would use many recruiting methods. According to Miles and Snow (1978; 1984), defenders tend to promote from within while prospectors are likely to hire externally at all levels as changing products and technologies require new kinds of skills. Thus, Olian and Rynes suggest that prospectors should be more likely than defenders to rely on search firms to help locate and screen applicants.

Glueck (1974, p. 217) has proposed that, "Complex and volatile organizations are more likely to use techniques of selection which do not require extensive validation...than are more stable organizations." Job assignments and jobs

themselves are likely to change rapidly in prospectors and more flexible parts of analyzers, as new markets are entered and new products developed. Thus, selection methods for these jobs are likely to be informal. Jobs are much more stable in defenders, so that it is technologically feasible to develop formalized selection systems such as validated tests, structured interviews, and weighted application blanks. In the functional and centralized structure of defenders, personnel specialists and/or higher level managers may be relatively more influential than immediate superiors in making hiring decisions, whereas in the more decentralized prospectors and analyzers, the immediate superior may be expected to have a larger say in final hiring decisions (Olian and Rynes, 1984).

Training. If jobs and technologies change rapidly in prospectors, then one might expect them to spend more time on training employees to meet these new demands. Hambrick (1983) reports some evidence that prospectors spend more money than defenders on educating their sales forces about new products. Defenders, on the other hand, should be more likely to have a formal annual training plan, because their training needs should be more routine and predictable, with the same courses being repeated regularly.

Performance Appraisal. Because of the stability of jobs and the emphasis on efficiency in defender organizations,

predictions concerning performance appraisal practices can also be made. Defenders should make greater use of formal appraisal systems than prospectors. The stable technology and environment also make feasible the development of objective measures and standards of performance in defenders.

Compensation. Because of the well defined and stable nature of jobs in defenders, these organizations should be more likely to have highly rational wage structures based on job content. Thus, one might expect that defenders would be more likely to use formal job evaluation methods than prospectors. Alternatively, one might hypothesize that prospectors and analyzers would need to use more formal methods of job evaluation because they are more often faced with the task of pricing new or unusual jobs. Glueck (1974, p. 441) has suggested that complex and volatile organizations will have a greater need for sophisticated job evaluation systems. Because reasonable arguments exist for both possibilities, no directional hypothesis regarding the use of job evaluation will be made, though the issue will be investigated.

Turning to other issues in compensation, the stable and predictable production process found in defenders together with their concern for efficiency should result in wider use of productivity-based pay systems such as piece rates.

Finally, their emphasis on providing a competitively priced product may mean that defenders are especially likely to use wage survey information in fine-tuning pay levels.

Other Personnel Policies. Since defenders are likely to be functionally organized, use bureaucratic control methods, and face the same kind of personnel decisions again and again, it seems reasonable to expect that such firms would be more likely to have written personnel policies than prospectors or analyzers. Defenders also should be more likely to use job analysis and have written job descriptions than prospectors. In the latter type of organization, jobs may not stand still long enough to permit accurate descriptions which would be useful over a period of time.

Hypotheses. As mentioned above, analyzers and prospectors will be combined for the purpose of analyses and comparison to defenders. The rationales given above for the expected differences between defenders and prospectors revolve around the variety of skills needed and the stability of jobs. On these two dimensions, analyzers seem more similar to prospectors than to defenders, as they must staff and train for a very wide range of jobs, only some of which are stable. A summary of the hypotheses is given below.

Hypothesis 1 - Prospectors and analyzers will use more different recruiting methods than defenders.

Hypothesis 2 - Defenders will be more likely to promote from within than prospectors and analyzers.

Hypothesis 3 - Prospectors and analyzers will be more likely to use search firms than defenders.

Hypothesis 4 - Prospectors and analyzers will be more likely to rely on interviews and selection decision making by the immediate superior, while defenders will tend to use many formal selection procedures and decision making by personnel specialists and upper level managers.

Hypothesis 5 - Prospectors and analyzers will do more training, but defenders will be more likely to have a formal annual training plan.

Hypothesis 6 - Defenders will be more likely to require that regularly scheduled, formal performance appraisals be made. They will also be more likely to use objective measures and standards in assessing performance.

Hypothesis 7 - Defenders will be more likely to use productivity based compensation and to consider wage survey data in setting rates.

Hypothesis 8 - Defenders will be more likely to have written personnel policies than prospectors and analyzers.

Hypothesis 9 - Defenders will be more likely to use job analysis and have written job descriptions than prospectors and analyzers.

Other Influences on Personnel Practices

Recent research indicates that organizations are not always as rational and responsive to their situation as contingency theories would suggest. For instance, following the theoretical work of Meyer and Rowan (1977), Tolbert and Zucker (1983) showed that the adoption of an innovative personnel management practice, the use of civil service systems by city governments, initially was predicted by factors representative of the true need for the innovation in the particular city. Thirty years later, adoption was no longer predicted by city variables. Civil service by then had become institutionalized as a socially acceptable and rational personnel system. Cities wishing to appear legitimate adopted civil service regardless of whether or not it met their other needs. This same phenomenon could occur with other personnel practices which have become institutionalized.

DiMaggio and Powell (1983) point out that organizations may adopt practices which are not especially well suited to carrying out their strategy because of normative or political pressure from groups associated with the organization. In the case of personnel practices, unions and personnel professionals are two such groups. The common agenda of organized labor is to promote homogeneity and solidarity in the workforce and emphasize rewards based on seniority rather than merit. In line with this, Cohen and

Pfeffer (1986; Pfeffer and Cohen, 1984) found that the presence of a union reduced selectivity and internal labor market practices. Dimick and Murray (1978) also found that unionization was negatively related to the number and sophistication of selection methods used. Thus, one might expect somewhat similar personnel practices to occur in unionized firms, regardless of strategy, if unions are successful in imposing their preferences on management. Accordingly, personnel practices and strategy may be more congruent in non-unionized establishments.

A second group is personnel professionals within the establishment. Baron, Dobbin, and Jennings (1986) have described how personnel practitioners defined a demand for their expertise following World War II and thus increased their power in organizations. Cohen and Pfeffer (1986; Pfeffer and Cohen, 1984) have shown that having a personnel department is related to high selection standards and the presence of an internal labor market. Personnel professionals are trained in "proper" and "institutionalized" personnel management methods. They are likely to try to implement these methods, both because they believe that the methods are useful and to increase their own influence in the organization, regardless of whether these idealized practices are needed or are consistent with organizational demands. Thus, organizations with large and

formal personnel units may adopt practices not necessarily suited to their strategy.

A third interest group mentioned by Cohen and Pfeffer (1986) is corporate headquarters. In the interests of fairness and consistency across units, common and formalized practices may be imposed on all units by corporate personnel, even if these practices are unnecessary or unwieldy for specific units. Thus, strategy and human resource practices may match better in establishments which do not receive guidance from a corporate or regional personnel office.

To summarize, personnel practices may be more a function of interest groups such as unions, personnel professionals on site, or corporate personnel units, than of organizational strategy and the current demands of that strategy. In the analyses to follow, the main effects of strategy on practices will be evaluated, as will the interaction between the presence of each interest group and strategy.

Method

Data were collected via a mailed questionnaire sent to 900 establishments in Singapore. A mailing list was compiled from the membership rosters of the Singapore Institute of Personnel Management (a co-sponsor of the survey), the Singapore Manufacturers Association, and the International

Chamber of Commerce. Each establishment received only one questionnaire, addressed to the highest ranking personnel officer employed at that location. Respondents were guaranteed confidentiality, and follow-up letters were sent to non-respondents three weeks after the initial mailing. A total of 174 questionnaires were completed and returned. Given the twelve page length of the questionnaire and the large amount of data requested, this 19.3% response rate was gratifying.

The organizations responding represented a wide cross section of firms. The size of parent firms varied from 5 to 660,000 total employees with a median of 900, while the size of responding locations varied from 2 to 3000 employees with a median of 137. The most common types of businesses were manufacturing (47 firms) and financial and business services (34 firms). Other respondents were involved in transportation and warehousing (8), international trade (11), retail/hotel/restaurant (10), engineering and construction (12), petroleum (4), multiple categories (18), and unspecified other businesses (29). One hundred and eight of these firms were multinationals with headquarters outside of Singapore, while 66 were firms limited to or headquartered in Singapore.

Independent Variables

Strategy was measured by asking respondents to check the description which best fit their establishment's strategy. Descriptions were similar to those used by Snow and Hrebiniak (1980), except that reactor was not included as a choice because of the negative connotations associated with this strategy. Forty-eight respondents said that their organizations most resembled defenders, eighty-three analyzers, and twenty-two prospectors. Fourteen organizations reported using an unspecified "other" strategy or did not respond to this item. These cases were excluded from further analysis. Additional support for the self-classifications of strategy comes from a scale on technological change. Three items asked whether the location had significantly changed operating procedures, changed the basic materials used in production, or changed products or services in the last two years. As would be expected, prospectors and analyzers averaged a significantly greater number of changes (.94) than defenders (.60, $t=2.31$, $p < .03$).

The effects of three interest groups were evaluated. Union presence was assessed by asking whether or not any employees at the site were represented by a union. The second interest group was a professionalized personnel unit on site. This was measured in two ways: 1) whether or not the top ranking personnel officer at the establishment was a

member of the Singapore Institute of Personnel Management, and 2) the average number of personnel professionals per 100 employees at the site (median split at .71). Finally, respondents were asked to check yes or no to the question of whether or not the personnel function at their site received policy guidance and/or programs from a personnel department located elsewhere.

Dependent Variables

Hypothesis one concerned the number of recruiting methods used. Respondents were asked to check which of 10 methods (see Table 1) they used in recruiting for each of five classes of jobs (clerical and office; production, maintenance, and service; sales; professional and technical; and managerial). The mean number of methods used for each job class was calculated. In addition, a summary variable was created which represented the total number of different methods used on at least one job by each respondent.

Hypothesis two referred to promotion from within. A ten item promotion practices scale was used to assess this construct (coefficient alpha = .69). Five of the items were the internal labor market scale used by Cohen and Pfeffer (1986). All items were answered yes or no, and can be found in Table 1.

Hypotheses three and four focused on selection practices. Respondents were asked to check which of 15 selection methods were used for each of the five job groups (see Table 1). Measures of the use of formal selection methods were created by summing across all methods except the unstructured interview for each job class and overall. Respondents also checked which of five interview practices were followed in selecting for each job class. Additional items asked which person usually had the final say in making hiring decision for each of the five job classes.

Several items dealt with the hypothesis on training. One item asked whether or not the location had a formal annual training plan, while other items asked for the average number of days of initial training of new hires, the average number of days of training per year for current employees, and the percent of employees involved in company-sponsored training each year, for each of five job classes.

Performance appraisal questions asked whether or not a formal appraisal system was in effect for each of three job classes (non-managerial, sales, managerial/professional), and which of four appraisal methods was used for each job (see Table 1).

Hypothesis seven concerned job evaluation and compensation practices. Respondents checked which, if any, of seven job

evaluation methods were used for each of three job classes, indicated whether or not productivity-based incentives were used for each class, and used a three point scale to rate the extent to which pay levels were influenced by numerous environmental, job, and personal factors. For the purpose of this study, the two factors of interest were "formal wage surveys of the external market" and "informal knowledge of market rates".

Dependent variables for hypotheses eight and nine were measured by single yes-no items asking whether or not the location had written personnel policies, whether formal job analyses were performed, and whether there were written job descriptions for the jobs performed at the location.

Results

Preliminary analyses were undertaken to ascertain that the strategy variable was not confounded with other characteristics which might have affected personnel practices. T-tests showed that defenders were not significantly different from analyzers and prospectors in terms of total firm size, number of locations, size of responding location, date of founding of firm or location, percent of unionization, or multinational vs local status.

Strategy and Personnel Practices

Two-way analyses of variance with strategy as one independent variable and one of the interest group indices as the other independent variable were performed on each personnel practice. Main effects of strategy which were observed consistently across analyses will be reported below, followed by a discussion of interaction effects.

Hypothesis one concerned the number of recruiting methods used. This hypothesis was supported for only one job group --prospectors and analyzers used more recruiting methods when searching for salespersons than did defenders.

Hypothesis two on internal promotion practices was not supported, as defenders were no more likely to promote from within than prospectors and analyzers. Hypothesis three suggested that prospectors and analysers would be more likely to use search firms in recruiting, because they were expected to externally recruit a large number of experienced employees. That this hypothesis was not supported is not surprising given that no differences in promotion from within versus hiring from outside were observed.

Hypothesis four concerned the formality of selection methods used. Prospectors and analyzers were not different from defenders in terms of the total number of formal selection procedures used for any job or overall. However, defenders were more likely to use the formal practice of a panel

interview, especially when selecting office workers and managers. In prospectors and analyzers, an interview with the prospective immediate superior was significantly more likely to be used in hiring office workers. As expected, the immediate superior was more often the final selection decision maker in prospectors and analyzers than in defenders. This effect was especially consistent when decisions on hiring managers and technical and professional personnel were being made.

Hypothesis five concerned training. As expected, prospectors and analyzers gave significantly more days of initial training of all new employees combined, and also provided more days of training for incumbent managerial employees than defenders. However, there were no strategy effects on having a formal annual training plan. Likewise, the hypothesis concerning performance appraisal formality and methods received no support. However, hypothesis seven on compensation was partially supported. Productivity-based incentives were used more frequently in defenders than in analyzers and prospectors. The two strategy groups did not differ on the extent to which wage surveys or informal knowledge of market rates affected pay amounts. Defenders were most likely to report using no job evaluation methods at all for each job class, while prospectors and analyzers were more likely to use some formal method rather than none. Finally, there were no significant differences in the extent

to which job analyses were conducted, written job descriptions used, or written personnel policies used.

Interest Groups and the Strategy/Practices Match

Three interest groups were discussed whose presence may have weakened the strategy-practices match. Interactions between strategy and interest group variables will be reported below for each group in turn.

Unions. Two significant interaction effects of strategy and union presence on personnel practices for non-managerial employees were observed. First, interviews with a manager above the immediate superior, a formal practice expected in defenders, were much more likely to be used in defenders without a union than with a union ($F_{1,145} = 5.0, p < .03$). Prospectors and analyzers used this type of interview with moderate frequency regardless of union status. Second, the percent of all employees receiving some company sponsored training each year was twice as high in prospectors and analyzers without a union as in defenders without a union. However, when a union was present, defenders trained a greater percent of their employees than prospectors and analyzers ($F_{1,99} = 8.1, p < .01$). Both of these interactions suggest that unions interfere with the adoption of strategy-consistent personnel practices.

Professional Personnel Department on Site. This was operationalized as whether or not the highest ranking personnel professional belonged to the Singapore Institute of Personnel Management, and as the number of human resource management professionals per 100 employees at the site. These two variables were not significantly correlated (ϕ coefficient = .07), indicating that they may tap quite different aspects of the potential of the personnel department to influence practice.

Looking first at the SIPM membership variable, two interactions with strategy were significant. Search firms were used more often by prospectors and analysers than by defenders (as originally predicted), but only when the highest ranking personnel officer was not a member of SIPM. When an SIPM member was present, both classes of establishments used search firms an equal and intermediate amount ($F_{1,147} = 3.9, p < .05$). This may simply reflect the greater need of prospectors and analyzers for outside help with their more complicated selection tasks when expertise is not available within the personnel department. Second, formal wage surveys were weighted much more heavily in determining compensation levels for salespeople in defenders than in prospectors and analyzers (as originally hypothesized) when the highest personnel officer was not a member of SIPM. When an SIPM member was present,

prospectors and analyzers relied more than defenders on formal wage surveys ($F_{1,87} = 5.4, p < .03$).

In both of these interactions, establishments used the practices hypothesized to be best suited to their strategy when a professionally affiliated personnel manager was not present. This may suggest that professional personnel people do advocate practices which are not always suited to their particular organization's situation.

Turning to the ratio of personnel professionals to employees as an independent variable, four interactions were significant. Use of an in depth interview by personnel professionals when selecting production operators and salespeople was much more common in defenders with a large ratio of personnel professionals to employees. Use of this type of interview was lowest among defenders with fewer personnel professionals per 100 employees. Prospectors and analyzers were about equally likely to use interviews with personnel professionals, regardless of their ratio to employees. We had originally suggested that this type of centralized, formal selection process would be more common in defenders, and we find that it is, given a large enough personnel group to conduct the interviews.

One interaction on a performance appraisal practice was significant. Defenders were more likely to use objective measures of performance for non-managerial employees (as

predicted), but only when there was a high ratio of personnel professionals to employees. Similarly, defenders relied more on formal wage surveys to set pay levels for salespeople than did prospectors and analyzers, but only when there were sufficient personnel professionals present. These four interactions suggest that having a large personnel staff for the number of employees is associated with using more suitable personnel practices given the establishment's strategy. Thus, relatively larger personnel departments are not imposing unnecessary practices on all establishments, but are providing the manpower necessary to carry out the appropriate formalized practices expected to be effective in defenders.

Corporate Guidance. Three interactions involving guidance from a corporate or regional personnel office were observed. In establishments without guidance, prospectors and analyzers used more methods for recruiting office personnel than defenders, as suggested in hypothesis one. However, when guidance was received, establishments using both strategies used a similar and intermediate number of recruiting methods. A significant interaction was also observed for use of informal knowledge of market rates in setting pay levels for managers. Such information was weighted more heavily in defenders than in prospectors and analyzers (as hypothesized), but only when there was guidance from another personnel group ($F_{1,106} = 4.7, p < .04$).

Without guidance, both types of establishments relied heavily on this type of information. Finally, defenders were much more likely to do job analysis when they had guidance than when they did not. Prospectors and analyzers were moderately likely to analyze jobs regardless of guidance ($F_{1,86} = 8.9, p < .01$). Hypothesis nine had suggested that defenders would be more likely to analyze jobs, but this appears to be true only when they receive guidance. These last two interactions suggest that outside guidance may enhance the strategy-practices match, while the first one led to the opposite conclusion.

Discussion

To summarize, main effects of strategy on personnel practices were found in the expected direction for recruiting of salespersons, use of panel interviews, use of an interview by the prospective immediate superior, and impact of the prospective immediate superior in final selection decision making. Also as expected, prospectors and analyzers gave more training and were less likely to use productivity incentives. They also were more likely to use some type of formal job evaluation than were defenders. The next step in this research should be to evaluate whether practices hypothesized to be appropriate for various strategies, and found to be used more frequently in some strategies than others, actually result in meaningful

outcomes such as profits, low turnover, and high individual performance.

Turning to the hypotheses which were not supported, no differences were found in the extent to which organizations of different strategies used internal promotion, large numbers of formal selection devices, search firms, formal performance appraisal, job analysis, and written personnel policies. It was suggested that the presence of pressure groups with preferences for certain practices might override the effect of strategy on practices. These groups were unions, a professional personnel department on site, and corporate or regional personnel groups. Thus, interactions between strategy and the presence of these groups were assessed. Results were mixed as to whether or not the presence of pressure groups enhanced or inhibited the use of personnel practices thought to be appropriate for each strategy. Further, given the large number of potential interactions tested and the relatively few which were significant, it seems safest to conclude that the existence of these pressure groups is not to blame for the lack of fit between strategy and personnel practices. There must be further reasons for the lack of relationship found between strategy and some personnel practices.

One such reason could be coercion by a government. Baron et al. (1986) have described how federal regulations during

World War II shaped and homogenized personnel practices across industries. Certainly Title VII of the Civil Rights Act and similar legislation in the United States would be expected to exert a homogenizing and formalizing effect on recruitment, selection, and appraisal practices regardless of strategy. It was thought that this Singapore sample would be relatively free of these constraining effects because there is no government requirement to adopt rational or nondiscriminatory employment practices.

However, lack of direct government pressure does not imply equal lack of social pressure. As mentioned in the introduction, once a practice is institutionalized, there is pressure to adopt it to gain legitimacy. To the extent that practices are institutionalized as rational and proper personnel management, they may be adopted without regard for their actual usefulness in implementing strategy (Tolbert and Zucker, 1983). None of the personnel practices which were assessed in this paper are especially new or innovative. All have been recommended practices for years, if text books and professional publications are any guide. Thus, organizations which have been formed recently or those with a particular desire to appear legitimate might have adopted these institutionalized practices as a matter of course, without regard for the demands of their strategy.

A third and related reason for strategy not matching practices may be mimicry. DiMaggio and Powell (1983) suggested that organizations may copy the practices of successful firms, hoping thereby to achieve success themselves. Many of the practices copied may not be related to success, or may be inappropriate to the environment and strategy of the copying firm. During the rapid and recent industrialization of Singapore, there has been a great deal of emphasis on learning from Japanese and Western human resources management practices. The nation-wide drive for Work Improvement Teams (quality circles) is one example. Thus, mimicry of personnel practices seems especially likely to have occurred here.

A fourth reason, suggested by Baron et al. (1986), is that bureaucratic personnel practices are seldom abandoned once implemented. This may be partly due to self-serving behavior by personnel specialists, and partly due to simple inertia. Lack of fit between strategy and personnel practices may be caused by past shifts in strategy from defender to analyzer or prospector which were not matched by congruent changes in personnel practices.

A fifth reason may be the effects of other factors such as establishment growth or contraction and/or the tightness of relevant labor markets. Certainly these factors should have a strong effect on recruitment and selection practices, and

possibly on training and compensation procedures as well. These factors are independent of strategy, but seem of more immediate importance in determining personnel practices.

Finally, our sample might have been somewhat restricted. Although the sample contains a wide range of industry types and sizes, it is possible that the 174 establishments which chose to respond were more attuned to human resource management issues than the 726 which did not. Their practices may have been more progressive and homogeneous than would have been the case in a larger and more representative sample. Strategy effects would be expected to emerge more clearly in a sample without this possible restriction.

In sum, this study represents a first step in empirically exploring the relationship between business level strategy and human resource management practices. The effects of strategy on practices which were significant were all in the direction expected from a logical consideration of how strategy should affect human resource needs. However, many expected effects failed to materialize. A number of moderators were suggested which may account for the lack of links between strategy and personnel practices. In addition, one should note that past theorizing in this area has been largely non-empirical and prescriptive in nature. This study was descriptive, and found that organizations

often do not follow the practices suggested for their strategy. This may indicate either that the prescriptions are wrong, or that organizations have not discovered which practices are truly optimal for their situations. The resolution of this question is left to future research.

References

- Baron, J.N., Dobbin, F.R., and Jennings, P.D. (1986). War and peace: The evolution of modern personnel administration in U.S. industry. American Journal of Sociology, 92, 350-383.
- Cohen, Y. and Pfeffer, J. (1986). Organizational hiring standards. Administrative Science Quarterly, 31, 1-24.
- Dimick, D.F. and Murray, V.V. (1978). Correlates of substantive policy decisions in organizations: The case of human resource management. Academy of Management Journal, 21, 611-623.
- Dyer, L. (1984). Studying human resource strategy: An approach and agenda. Industrial Relations, 23, 156-169.
- DiMaggio, P.J. and Powell, W.W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. American Sociological Review, 48, 147-160.
- Glueck, W.F. (1974). Personnel: A diagnostic approach. Dallas: Business Publications, Inc.
- Hambrick, D.C. (1983). Some tests of the effectiveness and functional attributes of Miles and Snow's strategic types. Academy of Management Journal, 26, 5-26.
- Meyer, J.W. and Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. American Journal of Sociology, 83, 340-363.
- Miles, R.E. and Snow, C.C. (1978). Organizational strategy, structure, and process. New York: McGraw Hill.
- Miles, R.E. and Snow, C.C. (1984). Designing strategic human resources systems. Organizational Dynamics, 13, 36-52.
- Milkovich, G. (1984). Introduction: Personnel strategy and evaluation. Industrial Relations, 23, 151-155.
- Olian, J.D. and Rynes, S.L. (1984). Organizational staffing: Integrating practice with strategy. Industrial Relations, 23, 170-183.
- Pfeffer, J. and Cohen, Y. (1984). Determinants of internal labor markets in organizations. Administrative Science Quarterly, 29, 550-572.

Snow, C.C. and Hrebiniak, L.G. (1980). Strategy, distinctive competence, and organizational performance. Administrative Science Quarterly, 25, 317-336.

Tolbert, P.S. and Zucker, L.G. (1983). Institutional sources of change in the formal structure of organizations: The diffusion of civil service reform, 1880-1935. Administrative Science Quarterly, 28, 22-39.

Table 1

Questionnaire Items

Recruiting Methods

- Recommendations by employees
- Walk-ins
- Newspapers ads
- Ads in trade magazines
- Ministry of Labor Employment Service
- Private employment agencies and search firms
- Job/career fairs
- Professional societies
- Radio/TV ads
- Signs

Promotion Practices Scale

- Does your location have an established promotion-from-within policy?*
- Have most employees with at least five years of service been promoted at least once?*
- Does your location fill most jobs from within?*
- Does your location frequently promote unskilled workers to semiskilled jobs?*
- Does your location frequently promote semiskilled workers to skilled jobs?*
- Does your location often promote non-supervisory employees into supervisory positions?
- Do performance evaluations include a rating of promotion potential?
- Are employees well informed of promotion policies and career ladders within the organization?
- Are employees well informed of job openings and encouraged to apply for promotion if they qualify?
- Are replacement charts or similar systems used to plan for managerial succession and prepare internal candidates for promotion?

Selection Methods

- Reference/record check
- Medical examination
- Work sample test
- Unstructured interview
- Structured interview
- Job knowledge test
- Mental ability test
- Personality test
- Physical ability test
- Polygraph/honesty test
- Assessment center
- Educational transcript
- Police/immigration check
- Investigation by an employment agency or search firm

Interview Practices

- Initial interview in the personnel office
- Interview by prospective immediate superior
- Interview by manager above immediate superior
- In-depth interview by a personnel officer
- Panel interview

Performance Appraisal Methods

- Ranking or paired comparison
- Rating scales
- Objective measures (units produced, etc.)
- Comparison to predetermined goals/standards (MBO, etc.)

Job Evaluation Methods

- Ranking
- Classification
- Point system (other than Hay)
- Hay system
- Factor comparison
- Industry standards
- Other formal method
- No formal job evaluation

Manpower, Personnel, and Training R&D Program

Director Research Programs
Office of Naval Research (Code 11)
Arlington, VA 22217-5000

Chairman, MPT R&D Planning Committee
Office of the Chief of Naval Research
Code 222
Arlington, VA 22217-5000

Life Sciences Technology Program
Manager (Code 125)
Office of the Chief of Naval Research
Arlington, VA 22217-5000

Defense Technical Information Center
DTIC/DDA-2
Cameron Station, Building 5
Alexandria, VA 22314

Science and Technology Division
Library of Congress
Washington, DC 20540

Office of the Assistant Secretary of
the Navy (Manpower & Reserve Affairs)
5D800, The Pentagon
Washington, DC 20350-1000

Team Head, Manpower, Personnel, and
Training Section
Office of the CNO (Op-914D)
4A578, The Pentagon
Washington, DC 20350-1000

Assistant for Research, Development
and Studies
Office of the DNCO(MPT) (Op-01B7)
Department of the Navy
Washington, DC 20370

Headquarters U.S. Marine Corps
Code MPI-20
Washington, DC 20380

Head, Leadership & Command
Effectiveness Branch (N-62F)
Naval Military Personnel Command
Department of the Navy
Washington, DC 20370-5620

Head, Military Compensation Policy Branch
Office of the DCNO(MPT) (Op-134)
Department of the Navy
Washington, DC 20370-2000

Director, Research & Analysis Division
Navy Recruiting Command (Code 22)
4015 Wilson Boulevard, Room 215
Arlington, VA 22203-1991

Naval School of Health Services
National Naval Medical Center (Bldg. 141)
Washington, DC 20814
ATTN: CDR J. M. LaRocco

Dr. Al Smode
Naval Training Systems Center (Code 07A)
Orlando, FL 32813

Dr. Eduardo Salas
Human Factors Division (Code 712)
Naval Training Systems Center
Orlando, FL 32813-7100

Commanding Officer
Navy Personnel R&D Center
San Diego, CA 92152-6800

Fleet Support Office
NPRDC (Code 301)
San Diego, CA 92152-6800

Director, Human Factors and
Organizational Systems Laboratory
NPRDC (Code 07)
San Diego, CA 92152-6800

Director, Training Laboratory
NPRDC (Code 05)
San Diego, CA 92152-6800

Department of Operations Research
Naval Postgraduate School (Code 55mt)
Monterey, CA 93943-5100

Asst. Chief of Staff for Research,
Development, Test, and Evaluation
Naval Education and Training Command (N-5)
NAS Pensacola, FL 32508-5100

Manpower, Personnel, and Training R&D Program

Head, Human Factors Laboratory
Naval Training Systems Center (Code 71)
Orlando, FL 32813-7100

Technical Director
NPRDC (Code 01)
San Diego, CA 92152-6800

Director, Manpower and Personnel
Laboratory
NPRDC (Code 06)
San Diego, CA 92152-6800

Department of Administrative Sciences
Naval Postgraduate School (Code 54Fa)
Monterey, CA 93943-5100

Program Director
Manpower Research & Advisory Services
Smithsonian Institution
801 North Pitt Street
Alexandria, VA 22314

Staff Specialist for Training and Personnel
Systems Technology
Office of the Under Secretary of
Defense for Research and Engineering
3D129, The Pentagon
Washington, DC 20301-3080

Technical Director
U.S. Army Research Institute for the
Behavioral and Social Sciences
5001 Eisenhower Avenue
Alexandria, VA 22333

Dr. Benjamin Schneider
Department of Psychology
University of Maryland
College Park, MD 20742

Dr. Albert S. Glickman
Department of Psychology
Old Dominion University
Norfolk, VA 23508

Prof. Bernard M. Bass
School of Management
University Center at Binghamton
State U. of New York
Binghamton, NY 13901

Personnel Analysis Division
AF/MPXA
5C360, The Pentagon
Washington, DC 20330

Scientific Advisor to the DCNO(MPT)
Manpower Support and Readiness Program
Center for Naval Analyses
2000 North Beauregard Street
Alexandria, VA 22311

Army Research Institute
ATTN: PERI-RS
5001 Eisenhower Avenue
Alexandria, VA 22333

Mr. Richard E. Conaway
Syllogistics, Inc.
5413 Backlick Road
Springfield, VA 22151

Dr. David Bowers
Rensis Likert Associates
3001 S. State St.
Ann Arbor, MI 48104

Dr. Cynthia D. Fisher
College of Business Administration
Texas A&M University
College Station, TX 77843

Dr. Barry Riegelhaupt
Human Resources Research Organization
1100 South Washington Street
Alexandria, VA 22314

Dr. T. Govindaraj
School of Industrial & Systems Engineering
Georgia Institute of Technology
Atlanta, GA 30332-0205

Prof. David W. Johnson
Cooperative Learning Center
University of Minnesota
150 Pillsbury Drive, S.E.
Minneapolis, MN 55455

Manpower, Personnel, and Training R&D Program

Lt. Col. Les Petty
MMCF
Headquarters, USMC
Washington, DC 20380

Col. Hester
MMPF
Headquarters, USMC
Washington, DC 20380

Director, Cognitive & Neural Sciences
(Code 1142)
Office of the Chief of Naval Research
Arlington, VA 22217-5000

Cognitive Science
(Code 1142CS)
Office of the Chief of Naval Research
Arlington, VA 22217-5000

Commanding Officer
Naval Research Laboratory
Code 2627
Washington, DC 20375

Psychologist
Office of Naval Research Detachment
1030 East Green Street
Pasadena, CA 91106

Assistant for Planning and MANTRAPERS
Office of the DCNO(MPT) (Op-01B6)
Department of the Navy
Washington, DC 20370

Dr. Walter Schneider
Learning Research & Development Center
University of Pittsburgh
Pittsburgh, PA 15620

Prof. George A. Miller
Department of Psychology
Princeton University
Princeton, NJ 08544

Dr. Jeffery L. Kennington
School of Engineering & Applied Sciences
Southern Methodist University
Dallas, TX 75275

Prof. Robert Hogan
Department of Psychology
University of Tulsa
Tulsa, Oklahoma 74104

Dr. T. Niblett
The Turing Institute
36 North Hanover Street
Glasgow G1 2AD, SCOTLAND

Dr. Douglas H. Jones
Thatcher-Jones Associates
P. O. Box 6640
Lawrenceville, NJ 08640

Dr. Richard C. Morey
Richard C. Morey Consultants, Inc.
4 Melstone Turn
Durham, NC 27707

Library
Naval War College
Newport, RI 02940

Library
Naval Training Systems Center
Orlando, FL 32813

END

9-87

DTIC